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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,723	04/13/2006	Hidetoshi Konno	1034185000077	1789

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

HUYNH, LOUIS K

ART UNIT	PAPER NUMBER
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3721

NOTIFICATION DATE	DELIVERY MODE
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04/28/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/575,723	Applicant(s) KONNO ET AL.	
	Examiner Louis K. Huynh	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to the amendment filed 02/01/2008.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papina et al. (US 5,787,681) in view of Simmons (US 3,925,139).

- With respect to claims 7, 10, 11 & 14, Papina discloses a packaging apparatus comprising a transversal sealing apparatus (14) for forming a transverse sealing on a packaging material (11), wherein the transversal sealing apparatus (14) includes: a high frequency oscillator (34), a control means (36) having an integrated controller receiving control signal from the control means (36) to control the high frequency oscillator (34), an inductor (31, 32), and pressure sensor (38) connected to the transverse sealing apparatus that would transmit a signal representing a factor (pressure) affecting the quality of the transverse sealing to the controller (36) (col. 5, lines 23-53). The apparatus of Papina meets all of applicant's claimed subject matter but lacks the specific teaching of the controller controlling the high frequency oscillator based on the control signal from the control means (36) that is based on a statistical relation between a plurality of different effect factors affecting quality of the transverse sealing.

Simmons discloses an apparatus for monitoring transverse seal on packaging material (F), and teaches that the quality of the transverse seal can be monitored based on effect factors such as sensed sealing temperature, sensed pressure of the sealing jaws (16 & 18), electrical energy dissipated during the formation of the seal (col. 3, lines 53-61), or combination of the effect factors (col. 6, line 63-col. 7, line 1). Therefore, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have modified the apparatus of Papina by having provided temperature sensor and/or energy sensor in addition to the pressure sensor (38), as taught by Simmons, in order to ensure a proper transverse seal on the packaging material.

- With respect to claims 8, 9, 12 & 13, the modified packaging apparatus of Papina meets all of applicant's claimed subject matter but lacks the specific teaching of the effect factor includes a moisture percentage contained in the packaging material, temperature of the fluid product, characteristics of the sealing thermoplastic layer of the packaging material, thickness of the conductive layer, an amount of energy output from the high frequency oscillator, or output impedance from the high frequency oscillator. However, in order to provide a proper seal the controller means (36) must have a set of control or master data for the sealing operation such as specific type of packaging material, thickness of the packaging material, melting temperature of the packaging material, output temperature of the inductors, duration for the seal to be completed, etc. so that the controller means (36) upon receiving data transmitted from the sensors would

compare the received data with the master data in order to adjust the operating parameters, such as sealing temperature or pressure of the sealing apparatus, of the sealing operation in order to form a proper seal and/or to stop the machine in order to prevent damages or waste. The controller means (36) of Papina is capable of storing master data for the transversal sealing operation of the packaging apparatus and comparing data received from the control means (sensor 38) (col. 5, lines 31-39). Therefore, it would have been obvious to a skilled person in the art, at the time of the invention, to have provided the controller (36) of Papina with a master data for the transversal sealing operation.

Response to Arguments

4. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3721

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 23, 2008

/Louis K. Huynh/
Primary Examiner
Art Unit 3721